USSN: 09/875,823

LISTING OF THE CLAIMS

1. - 30. (Canceled)

31. (Previously presented) A method of stimulating an anti-tumor immune response or treating a neoplastic disease, comprising administering to a subject a composition comprising: a cell expressing a cytokine from a recombinant polynucleotide, wherein the cytokine is stably associated in the cell outer membrane, and wherein the cell has been inactivated to prevent proliferation.

- 32. (Previously presented) The method of claim 31, wherein the cytokine is selected from IL-4, GM-CSF, IL-2, TNF-α, and M-CSF.
- 33. (Previously presented) The method of claim 31, wherein the cell is a cancer cell.
- 34. (Previously presented) The method of claim 31, wherein the cell is from a tumor of the same tissue type as a tumor in the subject.
- 35. (Previously presented) The method of claim 34, wherein the tumor is an ovarian cancer or a brain cancer.
- 36. (Previously presented) The method of claim 31, wherein the cell is allogeneic to the subject.
- 37. (Previously presented) The method of claim 31, wherein the cell is histocompatibly identical to the subject.
- 38. (Previously presented) The method of claim 31, wherein the composition further comprises a tumor-associated antigen, and wherein the combination of the cytokine and the

USSN: 09/875,823

tumor-associated antigen in the composition is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the subject.

- 39. (Previously presented) The method of claim 38, wherein the tumor-associated antigen is obtained from a cell autologous to the subject.
- 40. (Previously presented) The method of claim 38, wherein the tumor-associated antigen is expressed by the same cells expressing the membrane-associated cytokine.
- 41. (Previously presented) The method of claim 38, wherein the composition comprises a combination of:
 - a) the cell expressing the membrane-associated cytokine; and
 - b) a tumor cell autologous to the subject;

wherein the combination is effective in treating a neoplastic disease or eliciting an anti-tumor immunological response in the subject.

- 42. (Previously presented) The method of claim 41, wherein the tumor cell is a primary tumor cell dispersed from a solid tumor obtained from the subject.
- 43. (Previously presented) The method of claim 41, wherein the tumor cell is a glioma, a glioblastoma, a gliosarcoma, an astrocytoma, or an ovarian cancer cell.
- 44. (Previously presented) The method of claim 41, wherein the tumor cell has been inactivated by irradiation.
- 45. (Previously presented) The method of claim 31, wherein the cell expressing the membrane-associated cytokine has been inactivated by irradiation.
- 46. (Previously presented) The method of claim 31, wherein the cell produces a secreted cytokine in addition to the cytokine stably associated in the outer membrane.

USSN: 09/875,823

47. (Previously presented) The method of claim 31, wherein a majority of the cytokine

produced by the cell is present on the outer membrane of the cell.

48. (Previously presented) The method of claim 38, wherein the cytokine is selected from

IL-4, GM-CSF, IL-2, TNF-α, and M-CSF.

49. (Previously presented) The method of claim 31, wherein the composition comprises at

least two cells, each of which has been genetically altered to produce a different cytokine

at an elevated level, or is the progeny of such a cell, and wherein each cytokine is stably

associated in the outer membrane of the cell.

50. (Previously presented) A method of stimulating an anti-tumor immune response or treating

a neoplastic disease, comprising administering to a subject a composition comprising a

tumor associated antigen and a population of cells expressing a transmembrane cytokine,

wherein the cells have been inactivated to prevent proliferation, and

a wherein the composition is effective in stimulating an immune response to the tumor

associated antigen in the subject.

51. (Previously presented) The method of claim 31, wherein the cell is a human cell.

52. (Previously presented) The method of claim 31, wherein the cytokine naturally occurs as a

membrane cytokine.

53. (Previously presented) The method of claim 31, wherein the cytokine is a fusion protein

comprising a heterologous transmembrane region.

54. (Previously presented) The method of claim 31, wherein the cell has been transduced with

a retroviral expression vector, or is the progeny of such a cell.

USSN: 09/875,823

55. (Previously presented) The method of claim 31, which is a method for priming an

anti-tumor immune response.

56. (Previously presented) The method of claim 31, which is a method for boosting or

maintaining an anti-tumor immune response.

57. (Previously presented) The method of claim 31, which is a method for treating a neoplastic

disease.

58. (Previously presented) The method of claim 31, further comprising providing the cytokine

expressing cell that is present in the composition.

59. (Previously presented) The method of claim 38, further comprising providing the tumor

associated antigen that is present in the composition.

60. (Previously presented) The method of claim 31, further comprising transducing a cancer

cell with an expression vector encoding the membrane-associated cytokine.

61. (Previously presented) The method of claim 31, wherein the cytokine is IL-4.

62. (Previously presented) The method of claim 31, wherein the cytokine is GM-CSF.

63. (Previously presented) The method of claim 31, wherein the cytokine is M-CSF.

64. (Previously presented) A method of stimulating an anti-tumor immune response or treating

a neoplastic disease, comprising administering to a subject a composition containing an

allogeneic cell genetically altered to produce a cytokine at an elevated level, or the progeny

of such a cell, wherein the cytokine is stably associated in the cell outer membrane.

USSN: 09/875,823

65. (Previously presented) The method of claim 64, wherein the cytokine is selected from

IL-4, GM-CSF, IL-2, TNF-α, and M-CSF.

66. (Previously presented) The method of claim 64, wherein the cell is from a tumor of the

same tissue type as a tumor in the subject.

67. (Previously presented) The method of claim 64, wherein the composition further

comprises a tumor-associated antigen, and wherein the combination of the cytokine and the

tumor-associated antigen in the composition is effective in treating a neoplastic disease or

eliciting an anti-tumor immunological response in the subject.

68. (Previously presented) The method of claim 67, wherein the tumor-associated antigen is

obtained from a cell autologous to the subject.

69. (Previously presented) The method of claim 67, wherein the tumor-associated antigen is

expressed by the same cells expressing the membrane-associated cytokine.

70. (Previously presented) The method of claim 67, wherein the composition comprises a

combination of:

a) the cell expressing the membrane-associated cytokine; and

b) a tumor cell autologous to the subject;

wherein the combination is effective in treating a neoplastic disease or eliciting an

anti-tumor immunological response in the subject.

71. (Previously presented) The method of claim 70, wherein the tumor cell is a primary tumor

cell dispersed from a solid tumor obtained from the subject.

72. (Previously presented) The method of claim 64, wherein the cell expressing the

membrane-associated cytokine has been inactivated to prevent proliferation.

USSN: 09/875,823

73. (Previously presented) The method of claim 64, wherein the cell expressing the

membrane-associated cytokine has been irradiated.

74. (Previously presented) The method of claim 64, wherein the cell is a human cell.

75. (Previously presented) The method of claim 64, wherein the cytokine naturally occurs as a

membrane cytokine.

76. (Previously presented) The method of claim 64, wherein the cytokine is a fusion protein

comprising a heterologous transmembrane region.

77. (Previously presented) The method of claim 64, which is a method for stimulating an

immune response.

78. (Previously presented) The method of claim 64, which is a method for treating a neoplastic

disease.

79. (New) A method comprising:

administering to a subject a composition comprising:

a cell expressing a cytokine from a recombinant polynucleotide,

wherein the cytokine is stably associated in the cell outer membrane,

and wherein the cell is allogeneic to the subject and has been inactivated prior to

said administration to prevent proliferation.